EDITORIAL

Vaccinations: "not just for kids"[1]

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Vaccines which have drastically reduced the burden of childhood diseases are not yet accepted as contributing to improving healthy aging (1-3). The non-respect and/or absence of sustainability in vaccine programs do not enable maintenance of life-long protection against such childhood diseases as diphtheria (4), measles (5) and pertussis (6), which may result in increasing incidence of these diseases in adults in the future (7). Infectious diseases in older people also remain a significant cause of morbidity and mortality in the increasing population of adults aged 60 years and older (8, 9). The high burden of infectious diseases in this segment of the population is disproportionate, as many of these diseases are vaccine-preventable (10).

In 2001, the lower respiratory infections which represented the fourth most frequent cause of death in high-income countries – 4.4% of total deaths (11) – are three times more lethal in old than in young adults (12). Surprisingly, tetanus is still a current active disease, with 210 cases in Portugal between 1993 and 2002 (13), 175 in England between 1984 and 2000 (14) and 158 in Poland between 1998 and 2005 (15, 16) affecting essentially adults over 55 years of age. In the 1990s, a diphtheria epidemic in the newly independent states of the former Soviet Union claimed over 3000 lives, essentially among persons aged 35 to 50 years (4). The notification incidence of pertussis in the Netherlands also increased notably between 1998-2001 and 2002-2005 in the older population group (6). The annual incidence of Herpes zoster in the general population is estimated at 3.6-14.2 cases/1000, and the recurrence risk is multiplied by 8 to 10 in adults over the age of 60 (17, 18).

Without a specific disease-preventable vaccine program for adults aged 60 years and older, these infectious diseases will keep their upper morbidity and mortality ranks in the next few decades (19), whatever diagnostic and therapeutic progress is made, because the worldwide proportion of adults over the age of 60 will increase from 10% in 2002 to 21% in 2050 (20). During the same period, the increase will reach +60% in Europe (21).

These data explain why the two European geriatric and gerontological societies (European Union Geriatric Medicine Society [EUGMS] and the International Association of Gerontology and Geriatrics – European Region [IAGG-ER]) decided to promote preventive aspects in geriatric medicine, concerning both life threatening-diseases (influenza, pneumococcal pneumonia and tetanus/diphtheria) and diseases which adversely impact patients' quality of life (pertussis and herpes zoster).

Longer life expectation necessitates careful adaptation of vaccine guidelines to contribute to healthy aging (22). This special issue of *Aging Clin Exp Res* advocates the need for a life-course vaccine program based on:

- Better knowledge of the process of immunosenescence (see Grubeck-Loebenstein et al.) (23);
- Better understanding of the reasons for low vaccine coverage in older European citizens (see Samson et al.) (24);
- A detailed inventory of the consequences of infectious diseases and the potential benefits of their specific vaccine prevention (influenza: Gavazzi et al. (25), pneumococcal pneumoniae: Chidiac et al. (26), tetanus: Topinkova et al. (27), and Herpes zoster: Johnson (28));
- The need for new educational tools (Belmin et al.) (29) to contribute toward ensuring the willingness to vaccinate and be vaccinated (Baeyens et al.) (30) to reach WHO and EC vaccine goals (Gusmano et al.) (31).

The main focus of this European clinical vaccine advocacy (Michel et al.) (32) is to complement existing information and increase the acceptance of vaccinating all adults aged 60 and older, their family members, and healthcare professionals.

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Key words: European advocacy, healthy aging, vaccine.

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